

IN THE CLAIMS

1. (currently amended) A method for establishing an end-to-side anastomosis between a severed end of a first hollow organ and a side-wall of a second hollow organ, the method comprising:

(a) introducing an anastomosis coupling apparatus, having an input end and output end, said coupling apparatus having a hinge, said apparatus comprised to engage said severed end of a first hollow organ with said input end and engage said side-wall of a second hollow organ with said output end;

(b) affixing said input end to said first hollow organ site;

(c) positioning said output end of said anastomosis coupling apparatus in close proximity with the severed end of said second hollow organ;

(d) affixing said output end to said severed end of said second hollow organ.

2. (currently amended) A method for establishing an end-to-side anastomosis between a severed end of a first hollow organ and a side-wall of a second hollow organ, the method comprising:

(a) introducing a specifically configured anastomosis coupling apparatus, having an input end and output end, said coupling apparatus having a hinge, said apparatus comprised to

engage said severed end of a first hollow organ with said input end and engage said side-wall of a second hollow organ with said output end;

(b) affixing said output end to said severed end of said second hollow organ;

(c) positioning said input end of said anastomosis coupling apparatus in close proximity with the site for anastomosis of the first hollow organ;

(d) affixing said input end to said first hollow organ site.

3. (currently amended) An anastomosis coupling apparatus having an input end, ~~[[and]]~~ an output end and a hinge, said apparatus comprised to substantially engage said severed end of a first hollow organ with said input end and substantially engage a side-wall of a second hollow organ with said output end, said coupling apparatus positioning a tissue interface of said first hollow organ in close proximity with a tissue interface of said side-wall.

4. (canceled) The apparatus of claim 3, wherein said specifically configured anastomosis coupling apparatus is "T" shaped.

5. (canceled) The apparatus of claim 3, wherein said specifically configured anastomosis coupling apparatus is "V" shaped.

6. (withdrawn) The apparatus of claim 3, wherein said specifically configured anastomosis coupling apparatus is "U" shaped.

7. (original) The apparatus of claim 3, wherein said specifically configured anastomosis coupling is fabricated from a biodegradable material.

8. (original) The apparatus of claim 3, wherein said specifically configured anastomosis coupling is fabricated from a biocompatible material.

9. (original) The apparatus of claim 3, wherein said specifically configured anastomosis coupling is fabricated from a polymeric material.

10. (original) The apparatus of claim 3, wherein said specifically configured anastomosis coupling is fabricated from a metallic material.

11. (currently amended) An anastomosis coupling apparatus having an input end and output end, said apparatus comprised to substantially engage said severed end of a first hollow organ with said input end and substantially engage a side-wall of a second hollow organ with said output end, said coupling apparatus positioning a tissue interface of said first hollow organ in close proximity with a tissue interface of said side-wall, wherein said specifically configured anastomosis coupling apparatus has an acute angle between a longitudinal axis of said input end and an longitudinal axis of said output end of said apparatus.

12. (original) The apparatus of claim 11, wherein said acute angle is larger than 5 degrees.

13. (currently amended) An anastomosis coupling apparatus having an input end and output end, said apparatus comprised to substantially engage said severed end of a first hollow organ with said input end and substantially engage a side-wall of a second hollow organ with said output end, said coupling apparatus positioning a tissue interface of said first hollow organ in close proximity with a tissue interface of said side-wall, wherein said specifically configured anastomosis coupling apparatus has a right deflection angle between a right angle formed between the longitudinal axis of said input end and an axis parallel to the lip of a distal end of said input end.

14. (original) The apparatus of claim 3, wherein said right deflection angle is larger than 5 degrees.

15. (currently amended) An anastomosis coupling apparatus having an input end and output end, said apparatus comprised to substantially engage said severed end of a first hollow organ with said input end and substantially engage a side-wall of a second hollow organ with said output end, said coupling apparatus positioning a tissue interface of said first hollow organ in close proximity with a tissue interface of said side-wall, wherein said specifically configured anastomosis coupling apparatus has a lip deflection angle between a right angle formed between the longitudinal axis said input end and an axis parallel the lip of a distal end of said input end.

16. (currently amended) The apparatus of claim ~~[[13]]~~15, wherein said lip deflection angle is larger than 5 degrees.

17. (original) The apparatus of claim 1 further comprising a means for remotely manipulating said anastomosis coupling apparatus for positioning and engaging said coupling apparatus to one of said hollow organs.

18. (original) The method of claim 1, wherein said specifically configured anastomosis coupling is affixed to said severed end by sutures.

19. (original) The method of claim 1, wherein said specifically configured anastomosis coupling is affixed to said severed end by staples.

20. (original) The method of claim 1, wherein the adhering of the severed end of the first hollow organ is effectuated by applying a biocompatible glue or adhesive.

21. (original) The method of claim 1, wherein said specifically configured anastomosis coupling is affixed to said severed end by an any combination of sutures, staples, glue or adhesive.

22. (original) The method of claim 1, wherein said specifically configured anastomosis coupling is affixed to said severed end by sutures.

23. (original) The method of claim 1, wherein the first and second hollow organs are both vascular lumens.

24. (original) The method of claim 1, wherein the first hollow organ is the left internal mammary artery.

25. (original) The method of claim 1 wherein the second hollow organ is a coronary artery.

26. (original) The method of claim 2, wherein said specifically configured anastomosis coupling is affixed to said severed end by sutures.

27. (original) The method of claim 2, wherein said specifically configured anastomosis coupling is affixed to said severed end by staples.

28. (original) The method of claim 2, wherein the adhering of the severed end of the first hollow organ is effectuated by applying a biocompatible glue or adhesive.

29. (original) The method of claim 2, wherein said specifically configured anastomosis coupling is affixed to said severed end by an any combination of sutures, staples, glue or adhesive.

30. (original) The method of claim 2, wherein said specifically configured anastomosis coupling is affixed to said severed end by sutures.

31. (original) The method of claim 2, wherein the first hollow organ is the left internal mammary artery.

32. (original) The method of claim 2 wherein the second hollow organ is a coronary artery.

33. (original) The method of claim 2, wherein the first and second hollow organs are both vascular lumens.

34. (currently amended) A method for performing a coronary bypass by establishing an end-to-side anastomosis between an arterial source of oxygenated blood and a coronary artery having a stenosis, the method comprising:

(a) introducing a specifically configured anastomosis coupling apparatus, having an input end ~~[[and]]~~ an output end, and a hinge, said apparatus comprised to secure a first hollow organ to a second hollow organ;

(b) affixing a first end of said anastomosis coupling apparatus to a first hollow organ;

(c) affixing a second end of said anastomosis coupling apparatus to a second hollow organ.

35. (canceled) The method of claim 34, wherein said specifically configured anastomosis coupling apparatus is "T" shaped.

36. (canceled) The method of claim 34, wherein said specifically configured anastomosis coupling apparatus is "V" shaped.

37. (withdrawn) The method of claim 34, wherein said specifically configured anastomosis coupling apparatus is "U" shaped.

38. (original) The method of claim 34, wherein said specifically configured anastomosis coupling is fabricated from a biodegradable material.

39. (original) The method of claim 34, wherein said specifically configured anastomosis coupling is fabricated from a biocompatible material.

40. (original) The method of claim 34, wherein said specifically configured anastomosis coupling is fabricated from a polymeric material.

41. (original) The method of claim 34, wherein said specifically configured anastomosis coupling is fabricated from a metallic material.

42. (original) The method of claim 34, wherein said specifically configured anastomosis coupling is affixed to said severed end by sutures.

43. (original) The method of claim 34, wherein said specifically configured anastomosis coupling is affixed to said severed end by staples.

44. (original) The method of claim 34, wherein the adhering of the severed end of the first hollow organ is effectuated by applying a biocompatible glue or adhesive.

45. (original) The method of claim 34, wherein said specifically configured anastomosis coupling is affixed to said severed end by an any combination of sutures, staples, glue or adhesive.

46. (original) The method of claim 34, wherein said specifically configured anastomosis coupling is affixed to said severed end by sutures.

47. (original) The method of claim 34, wherein the first hollow organ is the left internal mammary artery.

48. (currently amended) A method for performing a coronary bypass by establishing an end-to-side anastomosis between an arterial source of oxygenated blood and a coronary artery having a stenosis, the method comprising:

having a stenosis, the method comprising:

(a) introducing a specifically configured anastomosis coupling apparatus having an input end and output end, said apparatus comprised to secure a first hollow organ to a second hollow organ, ~~The method of claim 34,~~ wherein said specifically configured anastomosis coupling apparatus has an acute angle between a longitudinal axis of said input end and a longitudinal axis of said output end of said apparatus;

(b) affixing a first end of said anastomosis coupling apparatus to a first hollow organ;

and

(c) affixing a second end of said anastomosis coupling apparatus to a second hollow organ.

49. (currently amended) The method of claim [34] 48, wherein said acute angle is larger than 5 degrees.

50. (currently amended) A method for performing a coronary bypass by establishing an end-to-side anastomosis between an arterial source of oxygenated blood and a coronary artery having a stenosis, the method comprising:

(a) introducing a specifically configured anastomosis coupling apparatus, having an

hollow organ, The method of claim 34, wherein said specifically configured anastomosis coupling apparatus has a right deflection angle between a right angle formed between the longitudinal axis of said input end and an axis parallel to the lip of a distal end of said input end.

(b) affixing a first end of said anastomosis coupling apparatus to a first hollow organ;

and

(c) affixing a second end of said anastomosis coupling apparatus to a second hollow organ.

51. (currently amended) The method of claim [34] 50, wherein said right deflection angle is larger than 5 degrees.

52. (currently amended) A method for performing a coronary bypass by establishing an end-to-side anastomosis between an arterial source of oxygenated blood and a coronary artery having a stenosis, the method comprising:

(a) introducing a specifically configured anastomosis coupling apparatus, having an input end and output end, said apparatus comprised to secure a first hollow organ to a second hollow organ, The method of claim 34, wherein said specifically configured anastomosis coupling apparatus has an lip deflection angle between a right angle formed

between the longitudinal axis of said input end and an axis parallel the lip of a distal end of said input end.

(b) affixing a first end of said anastomosis coupling apparatus to a first hollow organ;

and

(c) affixing a second end of said anastomosis coupling apparatus to a second hollow organ.

53. (currently amended) The method of claim [34] 52, wherein said lip deflection angle is larger than 5 degrees.

54. (previously presented) An anastomosis coupling apparatus, said coupling apparatus having an input end, and output end, and a hinge, said apparatus comprised to substantially engage said severed end of a first hollow organ with said input end and substantially engage said side-wall of a second hollow organ with said output end.

55. (previously presented) The apparatus of claim 54, wherein said hinge allows said coupling apparatus to attain an open configuration for positioning and securing said severed end of said first hollow organ within said input end.

56. (previously presented) The apparatus of claim 54, where said hinge allows said coupling apparatus to attain a closed configuration that substantially engages said severed end of said first hollow organ within said input end.
